



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/592,939

11/13/2006

Masaaki Nishimura

129461

6063

25944 7590 04/13/2009

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

GUARINO, RAHEL

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

04/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/592,939	<b>Applicant(s)</b> NISHIMURA ET AL.	
	<b>Examiner</b> Rahel Guarino	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 3/30/2004. It is noted, however, that applicant **has not filed a certified copy of the 2004-099237** application as required by 35 U.S.C. 119(b).

### *Drawings*

2. **Figure 3 should** be designated by a legend such as --**Prior Art**-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2611

4. Claim 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. JP2003-115883

Re claim 1, Watanabe discloses a transmission signal producing apparatus for producing a signal subjected to amplitude shift modulation according to digital data, as a transmission signal for use in transmission of the digital data between node devices connected to a network (fig.1), comprising:

a first signal generation circuit (11) for outputting a first signal (non-modulated signal) having a first amplitude according to a bit value "0" of the digital data and cyclically changing at a frequency in synchronism with a bit rate of the digital data (para#20);  
a second signal generation circuit (14) for outputting a second signal (modulated signal) having a second amplitude according to a bit value "1" of the digital data and cyclically changing at a frequency in synchronism with the bit rate of the digital data (para#21);  
and an output circuit (4) for producing the transmission signal based on the first signal and the second signal (para#14), wherein the output circuit includes a selection circuit (ON/OFF switch) for selectively outputting either the first signal or the second signal according to the bit value of the digital data (para#22).

Re claim 2, the transmission signal producing apparatus according to claim 1, wherein the first signal generation circuit successively outputs the first signals (para#18), the second signal generation circuit successively outputs the second signals (para#19), and the selection circuit is a switch circuit for selectively connecting and disconnecting (ON/OFF enables/disables) output ends of the first signal generation

Art Unit: 2611

circuit and the second signal generation circuit (para#15).

Re claim 3, the transmission signal producing apparatus according to claim 1, wherein the first signal generation circuit and the second signal generation circuit generate sinusoidal waveforms which are in synchronism with each other, and the output circuit outputs an output signal from the selection circuit as the transmission signal (para#24,, modulated waveform).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. JP2003-115883 in view of Muraishi US 6,529,562

Re claim 4, the transmission signal producing apparatus according to claim 1 does not teach wherein the first signal generation circuit and the second signal generation circuit are clock generation circuits which generate rectangular waveform signals which are in synchronism with each other, and the output circuit has a low pass filter into which an output signal of the selection circuit is input, and outputs an output signal from the low pass filter as the transmission signal.

However, Muraishi discloses wherein the first signal generation circuit and the second signal generation circuit are clock generation circuits which generate rectangular waveform signals (fig.3) which are in synchronism with each other, and the output circuit has a low pass filter (8) into which an output signal of the selection circuit is input, and outputs an output signal from the low pass filter as the transmission signal (col. 22 lines 30-40).

Therefore, taking the combined teaching of Watanabe and Muraishi as a whole would have been rendered obvious to one skilled in the art to modify Watanabe to utilize first signal generation circuit and the second signal generation circuit are clock generation circuits which generate rectangular waveform signals which are in synchronism with each other, and the output circuit has a low pass filter into which an output signal of the selection circuit is input, and outputs an output signal from the low pass filter as the transmission signal for the benefit of smoothes the portion of the data signal by removing high frequency component (col. 13 lines 1-5).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rahel Guarino whose telephone number is (571)270-1198. The examiner can normally be reached on M-F (7:30-4:00).

Art Unit: 2611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Payne David can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rahel Guarino/  
Examiner, Art Unit 2611

**/David C. Payne/  
Supervisory Patent Examiner, Art Unit 2611**